

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000462**Date Inspected:** 15-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** 114,89 & 77 Mock-Up**Summary of Items Observed:**

On this date, Caltrans Office of Structural Materials (OSM), Quality Assurance (QA) Inspector, David A. Smith was present for the random observations related to the following;

Item-1 89 Diaphragm plate number P213-2 to P1235-1 cover pass weld #63 the Zenhua Port Machinery Company (ZPMC), during a previous shift had performed a dry Magnetic Particle (MT) examination of the cover pass weld number 63. At this time the QA Inspector did perform an MT test on approximately 40% of the cover pass 63 on both the UP side and Down Side of the plate and was found to be in compliance with project specifications.

Item-2 114 Mock-Up Lower B Plate this QA Inspector did monitor ZPMCs Level II Zhou Dong Yun performing the MT testing on the grind out areas of stiffener MP 1006-1 and MP 1009-1. The grind out areas showed no relevant indications. This QA Inspector did perform a 100% dry powder MT test on each of the grind out areas and found them to be in compliance with the project specifications.

Item-3 114 Mock-Up Upper Plate B this QA Inspector did monitor ZPMCs Level II Zhou Dong Yun performing the MT testing on the grind out areas of stiffener MP 1006-2 and MP 1009-2. The grind out areas disclosed no relevant indications. This QA Inspector did perform a 100% dry powder MT test on each of the grind out areas and found them to be in compliance with the project specifications.

Item-4 114 Mock-Up Plate A Number 3 stiffener MP1002 was in the process of being preheated. Once the preheat temperature had reached 136°C welding of the FCAW root pass was performed by welder Ye Bing #066733. The weld travel speed was 336 mm/min., the amps were recorded at 310 and the volts at 32.5.

Item-5 114 Mock-Up Plate C was in the process of having the run off tabs welded in position.

Item-6 77 Mock-Up, Skin Plate-E, Stiffener number 1, MP5-2, filler pass welding to begin at a later time.

Item-7 77 Mock-Up, Skin Plate A, Stiffener number 1, the repair welding had stopped so that the repair area could cool down from its 200° C plus temperature. Stiffener number 3, MP 2-1, filler welding is being performed by

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

welder Zhang Binghun number 046706. The volts was measured at 29.5 and the amps at 289.

### Summary of Conversations:

CWI Zhu Zhong Hai was monitoring the temperature of the weld repair area on 77 Mock-Up, Skin A stiffener plate waiting for it to return to a lower temperature so that welding could resume.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Smith,David	Quality Assurance Inspector
<b>Reviewed By:</b>	Cochran,Jim	QA Reviewer

---